

“The Interplay of Social Media Content, Emotional Engagement, and Overconfidence in Shaping Investors Investment Decisions”

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Abstract

This study explores the intricate relationship between attitude towards social media content, emotional engagement, overconfidence, and their combined impact on investor investment decision, alongside exploring the moderating impacts of social media intensity. Drawing on Gratifications Theory, Cognitive Dissonance Theory, and Prospect Theory, the research examines how social media contents influence investor decision making behavior. To meet the objective, we conducted a survey of 491 social media users among Indian retail investors who have been actively investing in the stock market for a minimum period of three years and spend a minimum 2 hours daily on social media platforms. The analysis has been done using SPSS (AMOS 24) and Process macro (model 1) for moderation effect. Purposive and snowball sampling techniques have been employed for data collection. Findings reveal that social media content has a significant impact on irrational decision in the stock market. The increasing use of social media by retail investors directly impacts their emotional engagement with market-related content, and this emotional involvement, in turn, fosters a sense of overconfidence in their investment choices. Consequently, overconfident investors make riskier decisions, underestimate potential losses, and are susceptible to biases like herd behavior. This study highlights the psychological mechanisms driving these behaviors and emphasizes the need for greater awareness and regulatory measures to mitigate the risks associated with social media influence on investment decisions.

Keywords: Social Media, Emotional Engagement, Overconfidence, Investors Decision.

1. Introduction

In recent years, the dynamics of the Indian capital market have undergone a significant transformation, driven by technological advancements and an unprecedented surge in retail investor participation (Liu et al., 2023). This shift has been further accelerated by the rise of social media as a dominant source of information and discussion. Social media refers to digital platforms that enable users to create, share, and exchange content, as well as interact with others online. Social media has become an integral part of modern life, reflecting its widespread popularity and influence. Social media's popularity continues to grow, with platforms adapting to user needs and technological advancements, solidifying their role in daily life and global communication (Katz & Rice, 2020). According to the Datareportal Report (2024), the global number of social media users reached 5.22 billion as of October 2024, representing 63.8% of the world's population. Over the past year, social media usage has continued to expand, with 256 million new users joining with 5.2% annual growth rate, equivalent to 8.1 new users every second. Additionally, 94.5% of internet users worldwide now engage with social media monthly. Meanwhile, the Smart Insights Report (2024) highlights that individuals spend an average of 2 hours and 23 minutes daily on social media platforms. In the context of investing and financial markets, social media has emerged as a powerful force shaping investor behavior, trends, and market dynamics. In recent years, the proliferation of social media platforms has revolutionized the way and interact with financial information. According to The Newswire Report (2023) more than 60% of investors use social media in their investment research process. Social media accelerates the spread of financial news and investment insights, allowing investors to access real-time information and diverse perspectives. Social media has emerged as a powerful platform for communication, information sharing, and networking in the digital age (Massa et al., 2022). Social media offers a

democratized platform where financial insights, market trends, and expert opinions are accessible to a wider audience. Platforms such as Instagram, Telegram, Facebook and YouTube have become hubs for financial discourse, offering unprecedented access to market insights, opinions, and real-time updates (Kumar and Kumar, 2024). App intelligence from data.ai suggests that YouTube has the greatest number of active users today, giving the platform an index of 100. WhatsApp and Facebook social media platforms rank second and third (respectively), with this data suggesting that Meta's top messaging platform has a greater number of active app users than its top social network. YouTube's audience is still meaningfully larger than the audiences of both these Meta platforms. Instagram ranks fourth, with the platform's active app users equating to just over 70 percent of YouTube's active app user base. Figures published by the Statista Report (2024) suggest that Facebook has the greatest number of monthly active users, although it's important to note that some of the figures in this ranking represent monthly active users, while other figures reflect potential advertising reach, which is typically lower than total monthly active users. Caveats aside, this dataset indicates that there are now five social media platforms that each claim one billion or more monthly active users.

Report published by Financial Planning Association (2023) shows that approximately 32% of investors use social media to make investment decisions. These individuals tend to be younger, more diverse, and exhibit higher risk tolerance compared to those who do not use social media for investing. Investors appreciate the immediacy and diversity of perspectives, allowing them to tap into real-time discussions and gauge market sentiment (Massa & Zhang, 2023; Xu et al., 2023). However, this democratization of information also comes with potential pitfalls, particularly in how social media influences investor behavior. Financial influencers on social media can sway investor decisions. IR Magazine Report (2023) shows that nearly 22% of retail investors make investment decisions based on digital promotions or celebrity endorsements seen on social media. While some social media content creators provide valuable insights, others may lack expertise or have conflicts of interest, potentially leading to biased or harmful advice. However, the reliance on social media for financial decision-making introduces both opportunities and risks (Zhang & Liu, 2023). While it democratizes access to investment knowledge, it also raises concerns about misinformation, herd behavior, and the emotional influence of viral narratives. Understanding the interplay between social media content and investor psychology is critical for assessing its overall impact on financial markets (Dessart, 2017). One of the most significant effects of social media is its ability to amplify emotional engagement. Content designed to provoke strong emotional reactions whether excitement, fear, or outrage tends to gain more visibility through algorithms that prioritize engagement metrics (Bird et al., 2023). This emotional engagement affects decision-making processes of investors, leading to impulsive or poorly informed investment choices, and often leads to overconfidence among investors (Jain et al., 2023).

Overconfidence is another critical factor intertwined with social media usage. By providing a constant stream of information, including success stories and predictive analyses, social media can create an illusion of expertise among users (Akula et al., 2024; Rehman et al., 2024). False narratives or unverified tips can mislead investors, potentially leading to market inefficiencies and mispricing of assets. This perceived expertise often results in overconfidence, investors overestimate their knowledge, skills, or ability to predict market trends, they tend to make decisions that do not align with the underlying risks or market realities (Zhou & Wang, 2021). Overconfident investors are more likely to believe they possess superior insight compared to the broader market, often dismissing the inherent uncertainty and volatility of financial markets. This overestimation of abilities can manifest in several ways, such as excessive trading, or a tendency to disregard expert advice and risk management principles (Feng & Chen, 2021). Additionally, overconfidence may lead investors to concentrate their portfolios in a few stocks or sectors, ignoring the benefits of diversification and exposing themselves to significant risks (Acadian Asset Management Report (2024)). The consequences of overconfidence on investment decisions can be severe, ranging from significant financial losses to missed opportunities for long-term growth. On a larger scale, widespread overconfidence can contribute to market inefficiencies, such as asset price bubbles or increased volatility (Nagpal et al., 2024; Rehman et al., 2023). This paper seeks to explore the intricate relationship between social media usage, emotional engagement, and overconfidence, examining how these factors collectively influence investor decisions. By analysing existing literature, and utilizing behavioural finance frameworks, this research aims to shed light on the psychological and social dynamics that drive investment behaviours in the digital age. Understanding these relationships is crucial for developing strategies to mitigate the adverse effects of social media on financial decision-making and to promote more informed and rational investment practices.

2. Theoretical Background

The relationship between social media usage, emotional engagement, overconfidence, and its impact on investor decisions can be explained through various psychological and behavioural theories. According to the Uses and Gratifications Theory,

individuals actively engage with social media to fulfil specific needs, such as seeking information or social validation (Papacharissi, 2009). In the context of investing, social media platforms provide real-time updates, market news, and peer discussions, which often stimulate strong emotional reactions such as excitement, fear, or euphoria. This emotional engagement can lead to cognitive biases, such as overconfidence, where investors overestimate their knowledge or decision-making abilities. Cognitive Dissonance Theory further explains how emotional engagement fosters overconfidence by motivating individuals to resolve the psychological discomfort arising from inconsistencies between their beliefs and behaviors (Cooper & Fazio, 1984). This overconfidence is particularly significant in financial decision-making, as outlined in Prospect Theory, where investors often underestimate risks or overvalue potential returns. Behavioral biases, such as confirmation bias and the illusion of control, exacerbate this tendency, leading investors to make riskier or poorly-informed decisions (Kahneman & Tversky, 1979). Moreover, social media fosters herd behavior by encouraging investors to follow trends without adequate analysis. This cyclical interaction between social media usage, emotional engagement, and overconfidence highlights a feedback loop where positive outcomes reinforce risky behavior, while losses are rationalized, perpetuating the influence of social media on investment decisions. Understanding this framework is crucial for mitigating the cognitive and emotional biases that impact investor behavior in the digital age.

3. REVIEW OF LITERATURE

3.1 Attitude Towards Social-Media Content and Investors Investment Decision

Over the past few years, the popularity of social media has been growing exponentially. Social media comprises communication websites that facilitate relationship forming between users from diverse backgrounds, resulting in a rich social structure. User generated content encourages inquiry and decision-making (Kapoor et al., 2018). In the recent years, the majority of firms use social media as a marketing tool genuinely aids in establishing and keeping relationships with investors (Radhika et al., 2023). Social networking sites also play a significant role in influencing consumers' purchasing decisions (Xiang et al., 2022; Shamim & Islam, 2022; Kumar and Kumar, 2024). Social media differ from traditional media and promote public two-way interactions in which firm managers do not have complete control over what is said about their firms (Cade, 2018).

Investors are response to the sentiment expressed through social media (Liu et al., 2023) and many researchers try to explore the use of social media for sustainable investment (Chen & Liu, 2023). Investor sentiment on social media is a comprehensive expectation of stock market quotes, rather than a real-time perception of the stock market by investors, and investor sentiment on social media is forward looking (Liu et al., 2023). Social media plays a dominant role in bridging the "information asymmetry" between investors and markets (OuYang et al., 2017). Social media can significantly contribute to irrational financial decisions due to its influence on behavioral biases, the spread of misinformation, and the emotional appeal of viral trends. (Li et al., 2023) found that social media sentiment has a significant impact on irrational decision in the stock market.

H₁: There is a significant relationship between attitude towards social media content and investors' investment decision.

3.2 Attitude Towards Social-Media Content and Emotional Engagement

(Schivinski et al., 2016) introduces a multidimensional model to measure consumer engagement with brand-related content and, offers an insightful exploration of how consumers interact with branded content on social media platforms. It considers behavioral, cognitive, and emotional dimensions, making the analysis comprehensive and relevant to both academia and practice. Perceived interactivity, content relevance, and the richness of media enhance engagement. (Dessart, 2017) found the interplay of personal motivation and content characteristics in driving engagement. Additionally, the study establishes a clear link between engagement and key relational outcomes like trust and commitment, making it a valuable guide for brands aiming to enhance consumer relationships via social media. Similar to (Schivinski et al., 2016) and (Harrigan et al., 2017), the paper emphasizes that emotional engagement (e.g., feelings of enjoyment, interest, or connection) is a strong predictor of future behaviors like brand loyalty and advocacy. Brands that can evoke emotional responses are likely to see higher interaction and positive engagement rates. (Shahbaznezhad, 2021) reveals that visual content (such as videos and images) tends to generate more engagement than text-based content. This finding is in line with broader social media trends, where users are more likely to interact with content that catches their eye. (Dessart, 2017) emphasizes that social media engagement is a multi-dimensional construct, which includes cognitive, emotional, and behavioral dimensions, all of which drive relationships between consumers and brands on platforms like Facebook, Instagram, and Twitter.

H₂: There is a significant relationship between attitude towards social media content and emotional engagement.

3.3 Emotional Engagement and Overconfidence

Overconfidence, particularly in the context of decision-making, occurs when individuals believe they know more than they do, which often leads to less cautious behavior and can result in poor judgment (Jain et al., 2023). Emotional engagement is commonly understood as the emotional bond between consumers and a brand, often facilitated through content that resonates on a personal or emotional level (Chokpiriyawat & Siriyota, 2024). This emotional investment leads consumers to feel more knowledgeable or connected to the product or service, which can, in turn, foster overconfidence. Overconfidence is typically seen in individuals' overestimation of their knowledge or abilities in a particular area (Grezo, 2021). (Tuyon & Ahmad, 2018) explain that emotional states like excitement and fear directly impact the risk appetite of investors. Investors experiencing heightened emotion may take on more risk or reduce risk-taking (during times of anxiety or fear). (Vidal-Tomas & Alfarano, 2020) argues that emotional contagion in the market, such as widespread pessimism or optimism, can contribute to bubbles and crashes. (Bird et al., 2023) found that fear could drive volatility in financial markets, as investors react to perceived risks based on emotional responses rather than rational analysis.

H₃: There is a significant relationship between emotional engagement and overconfidence.

3.4 Overconfidence and Investors Investment Decision

Overconfident investors tend to overestimate their ability to predict market movements, leading to increased trading activity and higher risk-taking behaviors. Overconfidence is more pronounced during bull markets when investors interpret positive returns as validation of their skill rather than market conditions. During bear markets, overconfident investors are less likely to adjust their strategies, often compounding losses (Bouteska et al., 2023). Overconfident investors tend to overvalue stocks, perceiving them as less risky and overestimating the reliability of their private information. This behavior leads to increased demand for risky assets and reduced risk premiums, culminating in overvaluation. Overconfidence exacerbates mispricing in the market, distorting resource allocation and increasing market volatility (Aljifri, 2023). Unlike previous literature suggesting overconfidence harms returns, this study finds that trading activity associated with overconfidence does not necessarily result in underperformance. Some overconfident investors even achieve marginal gains, suggesting nuanced effects depending on market conditions (Inghelbrecht, 2024). (Bouteska et al., 2023) confirms that overconfident investors tend to trade more frequently, often leading to higher transaction costs without a corresponding increase in returns. This finding is consistent with earlier research (Barber and Odean, 2001; Glaser et al., 2005), which suggests that excessive trading driven by overconfidence can lead to suboptimal portfolio performance.

H₄: Overconfidence has a positively impact on investors investment decision.

3.5 Social Media Intensity as a Moderator

Social media platforms are increasingly utilized by retail investors for gathering investment advice, which can significantly shape investment behaviours. Investors often rely on online discussions, sentiment, and trending topics to guide decisions, which may lead to emotional reactions like herding behavior. Social media's influence is particularly pronounced among younger, tech-savvy investors, with many actively seeking investment opportunities based on online content (HersHKovitz et al., 2021). Investors who spent more time on social media were more likely to engage in speculative trading or overestimate the accuracy of their market predictions, leading to excessive risk-taking behavior (Murray et al., 2019). Investors who engage heavily on social media are more likely to make impulsive, emotionally-driven decisions, such as selling stocks during market dips due to heightened anxiety (Antonioni et al., 2017). High-intensity users are particularly vulnerable to the negative emotional outcomes associated with passive consumption of content, reinforcing the idea that more frequent, non-interactive use can lead to worse outcomes (Verduyn et al., 2015).

H₅: Social media intensity moderates the relationship between attitude towards social media content and emotional engagement decisions.

3.6 Research model

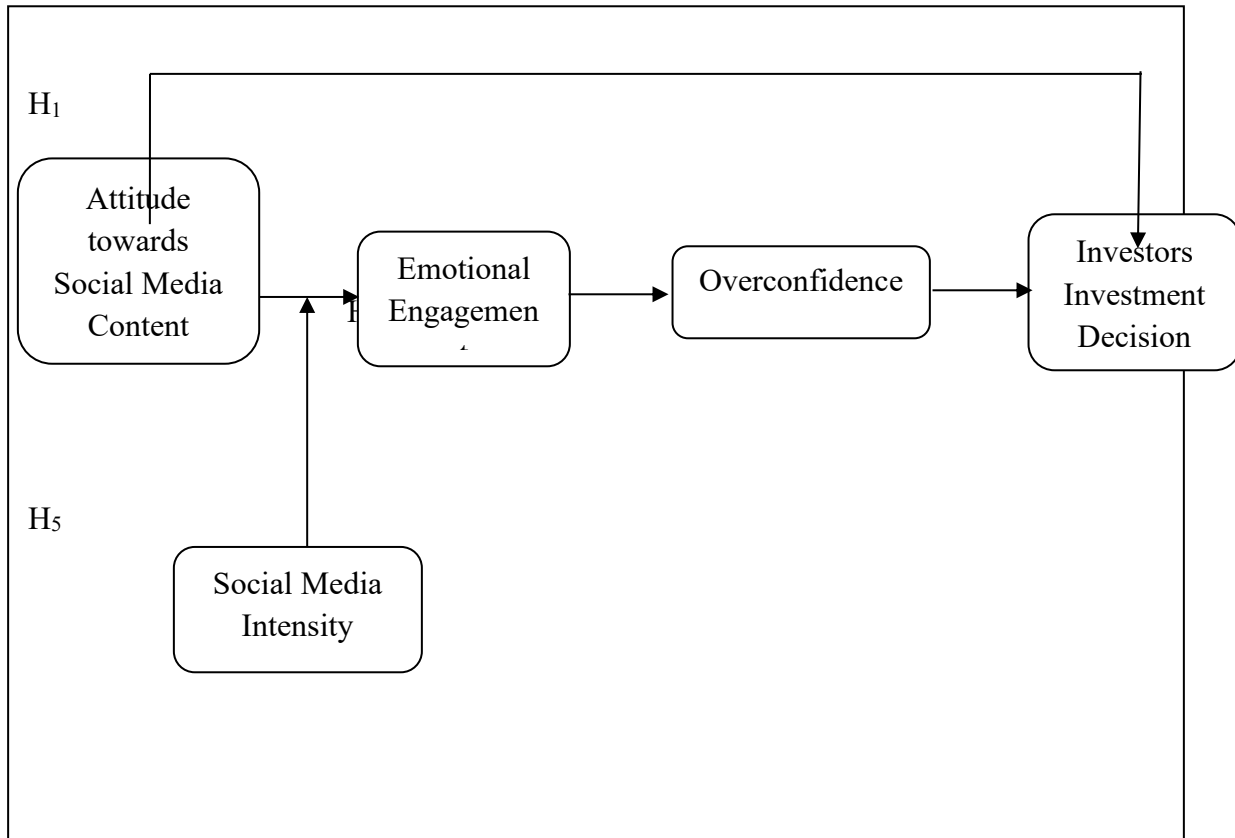


Figure:1 Conceptual Framework.
Source(s): Authors' own creation.

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According to the above literature, studies predominantly focused on social media and consumer purchase decision, examining various mediator and moderator variables (Xiang et al., 2022; Shamim & Islam, 2022; Kumar and Kumar, 2024; Schivinski et al., 2016; Harrigan et al., 2017; Grezo, 2021; Chokpiriyawat & Siriyota, 2024). However, these studies were focused on how social media has transformed consumer behavior and their purchase decisions. Limited attention has been given to the specific characteristics of social media content that drive emotional engagement, the mechanisms linking emotions to overconfidence, and the differential impacts on investors investment decision, particularly among Indian millennials. Therefore, the purpose of the study is to examine how social social-media contents influences investors investment decisions. Based on the aforementioned research gap, the arising research question is, "How does social media content influences investors investment decisions?" Additionally, on the basis of previous literature and social media theory, we have developed a conceptual model, as shown in Figure 1.

4 Research Methodology

3.1 Research Design

The study focused on exploring investors investment decision influenced by social media content, particularly among Indian retail investors who have been actively investing in the stock market for a minimum period of three years and spend a minimum 2 hours daily on social media platforms. Data collection took place between September 2024 and December 2024, utilizing purposive and snowball sampling methods. The purposive sampling technique is chosen for this study because the study focuses on the impact of social media content on investment decision-making patterns of retail investors, purposive sampling allows for the deliberate inclusion of individuals who possess the required knowledge and exposure to market

dynamics. By targeting this specific group, the research avoids data dilution from inexperienced investors who may not have encountered or been influenced by similar market scenarios. Experienced retail investors often form networks or communities, both online and offline, where they share investment strategies, discuss market trends, and exchange information. By leveraging initial participants who meet the study criteria, the snowball sampling method enables the researcher to identify and recruit additional participants through their referrals. This approach ensures that the sample is both relevant and adequately representative of the target group while also being time-efficient. Furthermore, snowball sampling helps in building trust among participants, as referrals from known individuals increase the likelihood of cooperation and accurate responses. This method is particularly advantageous in understanding the behavioral dynamics influenced by social connections and shared experiences among retail investors. Prior to data collection, explicit consent was obtained from participants. A 29 items questionnaire, structured into two sections, was developed and evaluated by a financial expert. A pilot testing involving 74 participants was conducted to evaluate the feasibility and reliability of the data collection instruments, procedures, and overall research design. The study employs a mixed-method approach for questionnaire distribution, utilizing both online and offline channels to maximize participant reach and ensure inclusivity. The questionnaire is distributed digitally using platforms such as Google Forms through social media platforms and hard copies of the questionnaire are distributed at locations where retail investors are likely to be found, such as stockbroking offices, financial planning seminars, and investor meetups. To determine the minimum sample size, the G*power software was utilized. With a model incorporating up to six predictors related to investor decision-making, the effect size was set at 0.15, and the desired statistical power was 0.95, exceeding recommended thresholds (Dattalo, 2008). This analysis determined a minimum required sample size of 146. The questionnaire was distributed via social media and email, resulting in 491 responses. Participants were granted access to the complete questionnaire only if they provided affirmative consent. After validation, 410 responses were deemed suitable for analysis. Table 1 provides detailed information about the sample, which was sufficient for robust data analysis and interpretation.

4. Data Analysis and Results

5.1 Measures

The questionnaire was developed utilizing standardized scales to ensure high levels of reliability, validity, and consistency in data collection. The standardized scales were derived from prior research and adjustment made to suit the context of social media content and investors investment decision. These adjustments included modifying certain statements to align with the concept of overconfidence of investors due to social media content. The scales covered various factors such as attitude towards social media content (Ling et al., 2010; Pellegrino et al., 2022), social media intensity (Schivinski et al., 2016; Pellegrino et al., 2022), emotional engagement (Wang et al., 2016; Pellegrino et al., 2022), overconfidence (Jain et al. 2021; Jain et al. 2023), and investors investment decision (Sarwar and Afaf 2016; Jain et al. 2023). Participants were gathered using a five-point Likert scales.

5.2 Common method biasness

Common Method Bias (CMB) refers to the systematic error that arises when the data for both the independent and dependent variables are collected from the same source or respondent at the same time. The Harman's Single Factor Test is one of the most commonly used techniques to assess the presence of Common Method Bias in survey data. It is conducted by performing an exploratory factor analysis (EFA) on all the items in the dataset to see how much variance is explained by a single factor. The study applied Harman's one-factor test to identify common method variance (CMV) before proceeding with the analysis of the measurement and structural models (Podsakoff et al., 2003). This involved performing an exploratory factor analysis, where all construct-related items were combined into a single factor without rotation. The results showed that the initial factor accounted for 41.352% of the total variance, which is below the recommended 50% threshold (Podsakoff et al., 2003). Furthermore, the variance inflation factor (VIF) was employed to evaluate common method bias. The VIF values for all constructs were below the threshold of 3.3 specified for assessing common method bias (Kock, 2017; Podsakoff et al., 2003). These findings suggest that common method bias does not have a significant impact on this study.

Table:1 Demographic profiles of the respondents

Variables		N	%
Gender	Male	313	76.34
	Female	97	23.66
Marital status	Married	289	70.49
	Unmarried	121	29.51
Age	20-30	162	39.52

	31-40	153	37.33
	41-50	57	13.90
	51-60	29	7.07
	Above 60	9	2.16
Educations	Senior High Diploma or Below	124	30.24
	Bachelor Degree	171	41.71
	Master Degree	89	21.71
	PhD Degree	26	6.34
Income	20000-30000	72	17.56
	31000-40000	107	26.10
	40000-50000	122	29.76
	Above 50000	109	26.59

Source(s): Authors' own work

5.3 Validation of measurement model

Confirmatory factor analysis (CFA) was performed using AMOS 24.0 to assess the measurement model's overall fit. The evaluation included five model fit indices, as well as checks for reliability, discriminant validity, and convergent validity to ensure the model's suitability. As noted by Ullman (2006), the χ^2 test value is often not ideal for assessing model fit in studies with large sample sizes due to its high sensitivity to sample size. Given the sample size of 410 in this study, alternative fit indices were utilized. The results showed the following values: $\chi^2/df = 2.178$, CFI = 0.978, NFI = 0.925, RMSEA = 0.065, and TLI = 0.967. All indices met the acceptable standards (Hair et al., 2021), confirming a good model fit. During the pilot testing stage, the questionnaire's face and content validity were reviewed and validated by experts. Internal consistency of the constructs was also established, with all Composite Reliability (C.R.) values exceeding 0.80 (Hair et al., 1988) and Cronbach's alpha values surpassing 0.7. Convergent validity was verified, as the average variance extracted (AVE) values for all constructs were above 0.50 (Fornell and Larcker, 1981), as detailed in Table 2. Discriminant validity of the model was confirmed using multiple approaches. For each construct, the square root of its AVE was greater than the absolute value of its correlations with other constructs (Fornell and Larcker, 1981). Additionally, the HTMT (Heterotrait-Monotrait) ratio of correlations, presented in Table 4, showed all values below 0.85 (Henseler et al., 2015), further affirming the discriminant validity of the constructs.

Table 2. Convergent and discriminant validity

Construct	Items	Factor Loadings	CR	AVE	CA α	MSV
Attitude towards social media content (ATTSC)	Advertising on social media is trustworthy.	.834	0.931	0.721	0.938	0.355
	Advertising on social media is funny.	.856				
	Brand pages on social media play an important role in my buying decisions.	.987				
	I consider users' content on social media good as it allows me to discover the best deals.	.778				

Emotional engagement (EE)	<p>I comment on text only posts made by brands on social media.</p> <p>I write reviews on brand pages on social media.</p> <p>I click like on pictures posted by other users on social media.</p> <p>I share content posted by other users (Not friends) on social media.</p> <p>I write posts.</p> <p>I update my personal profile (change image/contact information/privacy setting).</p> <p>I buy products or services directly on social media.</p>	.954 .789 .812 .878 .843 .785	0.922	0.752	0.949	0.458
Overconfidence (OC)	<p>I rely on social media insights, which enhance my confidence in making stock market decisions, sometimes leading me to overestimate my expertise</p> <p>Social media gives me confidence that I always know the right time to enter and exit the market.</p> <p>Social media makes me feel confident in taking investment decisions on my own, often without considering the need for opinions from friends or colleagues.</p> <p>Social media often leads me to trade more frequently in the stock market, believing that I'm making informed decisions.</p>	.871 .813 .845 .831	0.945	0.853	0.927	0.365
Investor Investment decision (IID)	<p>In general, I am satisfied with my investment decisions.</p> <p>My investment decision helps me in achieving investment objectives.</p> <p>I am confident that I can take investment decisions accurately.</p> <p>I mostly earn more than the average return generated by the market.</p> <p>I make all investment decisions on my own.</p> <p>I consider all possible factors (such as interest rate, inflation, global factors, political factors and so on) while making investment decisions.</p> <p>The return on my portfolio justifies my investment decisions</p>	.714 .743 .856 .721 .846 .856 .912	0.819	0.748	0.823	0.438
Social media intensity (SI)	I comment on text only posts made by brands on social media.	.905	0.928	0.670	0.964	0.334

	I write reviews on brand pages on social media.	.900				
	I click like on pictures posted by other users on social media.	.841				
	I share content posted by other users (Not friends) on social media.	.823				
	I write posts.	.774				
	I update my personal profile (change image/contact information/privacy setting).	.701				
	I buy products or services directly on social media.	.654				

Source(s): Authors' own work

Table 3. Inter correlation of constructs

	ATSC	EE	OC	IID	SI
ATSC	0.868				
EE	0.416	0.827			
OC	0.526	0.544	0.863		
IID	0.349	0.614	0.511	0.928	
SI	0.418	0.525	0.644	0.478	0.843

Source(s): Authors' own work

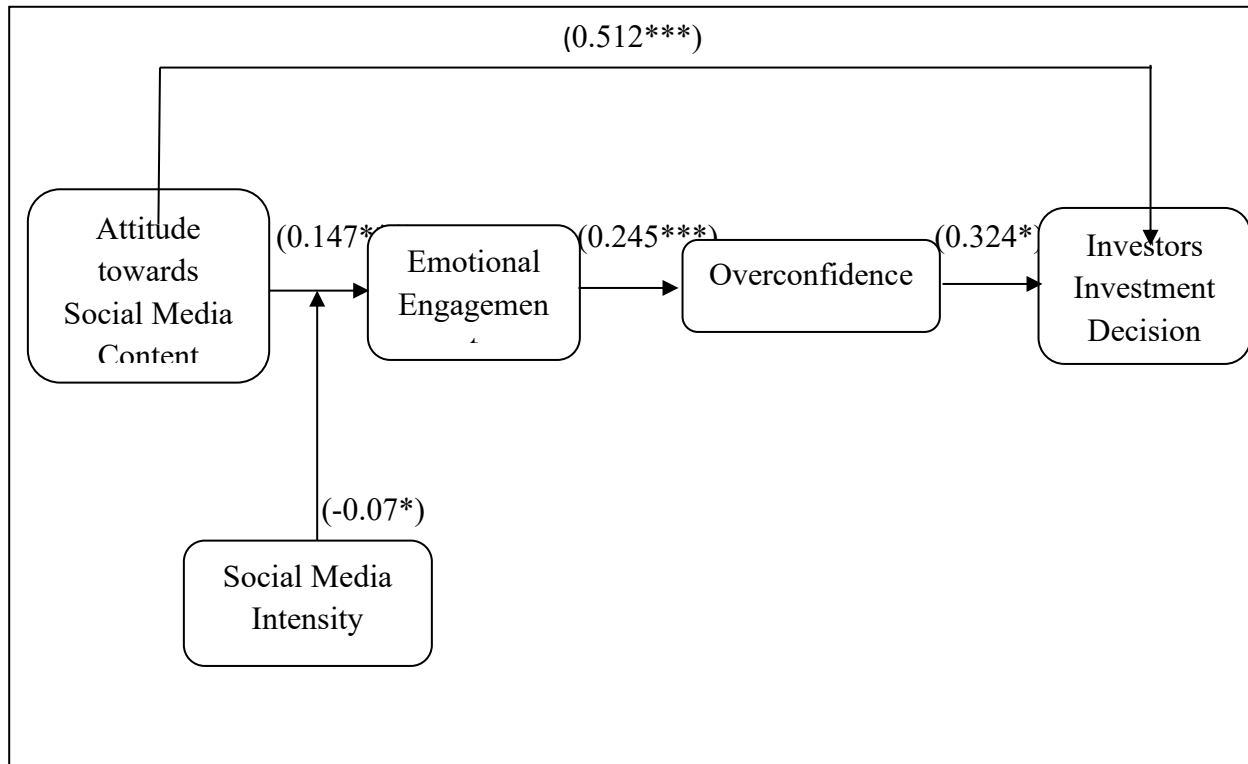
Bold value indicates strongly correlated with itself but have weak correlation with other construct.

Table 4. HTMT matrix

	ATSC	EE	OC	IID	SI
ATSC					
EE	0.545				
OC	0.664	0.521			
IID	0.512	0.652	0.481		
SI	0.442	0.527	0.353	0.514	

Source(s): Authors' own work

5.4 Structural Model



Source(s): Authors' own creation

Note(s): *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table 5 presents the findings from the structural model evaluation. The results confirm hypothesis H_1 , indicating a statistically significant positive relationship between attitudes toward social media content and investor investment decisions ($\beta = 0.587$, $p < 0.001$). The total effect model explains 21.25% of the overall variance in investment decisions. The analysis of the direct effect model highlights significant positive associations across multiple variables. There is a strong positive link between attitudes toward social media content and investor investment decisions ($\beta = 0.512$, $p < 0.001$). Additionally, attitudes toward social media content are positively related to emotional engagement (H_2) ($\beta = 0.147$, $p < 0.001$). Emotional engagement, in turn, shows a significant positive correlation with overconfidence (H_3) ($\beta = 0.245$, $p < 0.001$). Lastly, overconfidence is positively associated with investor investment decisions (H_4) ($\beta = 0.324$, $p < 0.05$).

Furthermore, the analysis of indirect effects reveals a positive relationship between attitudes toward social media content and overconfidence, mediated by emotional engagement ($\beta = 0.096$, $p < 0.001$). Finally, the indirect effect model demonstrates a significant association between emotional engagement and investor investment decisions ($\beta = 0.123$, $p < 0.01$).

Table 5. Structural model assessment

Path	Standardized path coefficients (β)	95% confidence level (Lower bound, Upper bound)
Total effect		
Attitude towards social media content \rightarrow Investor investment decision	0.587	0.352, 0.588
Direct effect		
Attitude towards social media content \rightarrow Investor investment decision	0.512	0.410, 0.645
Attitude towards social media content \rightarrow Emotional engagement		
Emotional engagement \rightarrow Overconfidence	0.147	0.181, 0.541
Overconfidence \rightarrow Investor investment decision		

	0.245 0.324	0.021, 0.145 0.154, 0.123
Indirect effect Attitude towards social media content → emotional engagement → overconfidence emotional engagement → overconfidence → Investor investment decision	0.096 0.123	0.111, 0.276 0.015, 0.072

Source(s): Authors' own work

5.5 Moderation effect

The study utilized Process Macro 4.2 in SPSS (Model 1) to test hypothesis H5 by conducting a moderation analysis to examine the effect of social media intensity on the relationship between attitudes toward social media content and emotional engagement. A bootstrap method with 5000 samples and a 95% confidence interval was employed to ensure the robustness of the results. The interaction analysis revealed a statistically significant negative moderating effect of social media intensity on the link between attitudes toward social media content and emotional engagement ($\beta = -0.07$, $t = -1.94$, $p < 0.05$), thereby supporting H₅. As shown in Figures 3, at low levels of social media intensity, the relationship between attitudes toward social media content and emotional engagement was stronger ($\beta = 0.43$, $p < 0.001$). At moderate levels, this relationship weakened slightly ($\beta = 0.41$, $p < 0.001$), and it became further reduced at high levels of social media intensity ($\beta = 0.35$, $p < 0.001$). These findings indicate that as individuals engage more intensively with social media, the positive relationship between their attitudes toward social media content and emotional engagement becomes less pronounced.

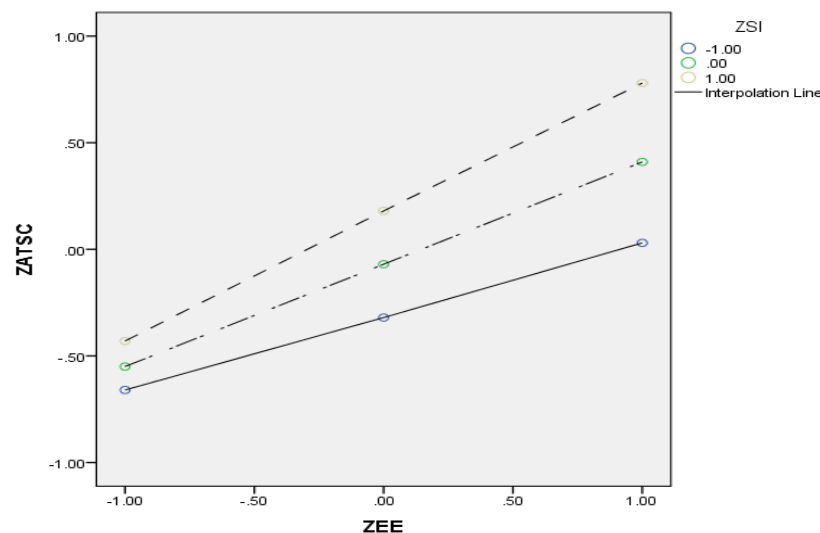


Figure:3 Social Media Intensity moderation

Source(s): Authors' own work

5. Discussions and Conclusions

6.1 Conclusions

The study aimed to examine the attitude towards social media content on investors investment decisions. It considered emotional engagement and overconfidence as mediators, while social media intensity served as a moderator. The empirical findings supported all research hypotheses. Social media can play a significant role in shaping investor decisions, offering both opportunities and risks. Attitude towards social media, emotional engagement, and overconfidence plays a crucial role in investment decisions. As users engage more intensively with social media, they develop stronger emotional connections to the content they encounter, which can increase their overconfidence. This overconfidence can then lead to suboptimal financial decisions, such as excessive risk-taking or overtrading, which can negatively impact long-term investment outcomes.

Firstly, the results of the direct effect confirmed a positive and significant impact of attitude towards social media content on investors investment decisions(H₁). It indicates that investors are not only consuming content but are actively using it as part

of their decision-making process. This finding is consistent with existing literature (Zhang & Liu, 2023; Niu & Chen, 2022; Gupta & Tiwari, 2022; Xie & Yang, 2021). These recent studies reflect the evolving understanding of how social media content affects investors' decisions, market sentiment, and overall market dynamics. It provides instant information, fosters herding behavior, and often triggers impulsive actions based on emotional responses or speculative trends. This can lead to suboptimal investment decisions, where actions are driven by emotion rather than careful analysis. Understanding these dynamics is crucial for investors who wish to avoid the pitfalls of impulsive trading and instead make more rational, long-term decisions. Secondly, the study examined the relationship between attitude towards social media content and emotional engagement (H_2). The findings align with previous studies (Wang & Zhang, 2023; Lee & Choi, 2018; Dhir et al., 2019; Zhao & Wang, 2019) indicating that attitudes towards different types of social media content can shape their emotional engagement with the platform. Individuals who have a positive attitude towards the content they encounter are more likely to experience stronger emotional responses, such as enjoyment, empathy, or excitement. On the other hand, negative attitudes may lead to disengagement or even adverse emotional reactions. Thirdly, the study explored the relationship between emotional engagement and overconfidence (H_3). The findings support previous research (Hassell & Stewart, 2017; Mattioli & Gregorio, 2018; Zhao & Wang, 2019) which revealed that reading and sharing posts on social media can create an "illusion of knowledge." It shows that emotional involvement with content can cause users to feel more confident in their understanding of certain issues, even when their knowledge is incomplete or flawed. Fourthly, the study explored the relationship between overconfidence and investors' investment decisions (H_4). The findings support previous research (Lusardi & Mitchell, 2020; Choi et al., 2019) investigating the impact of overconfidence on investment decisions in the context of Indian retail investors. It finds that overconfident investors tend to overestimate their ability to predict stock prices, leading to excessive trading and higher risk-taking, which reduces the performance of their portfolios. Finally, the study explored the moderated relationship between social media intensity and attitude towards social media content and emotional engagement. The findings align with previous research (Sato & Ma, 2019; Tao & Zhang, 2020; Zhang & Wang, 2018) indicating that users who engage more frequently with social media (i.e., those with high intensity) are more likely to experience stronger emotional reactions, and these reactions are more directly linked to their pre-existing attitudes towards the content. This moderated relationship suggests that the more users interact with social media, the more their emotional engagement is driven by their attitudes towards the content.

6.2 Theoretical Implications

Social media platforms are designed to increase user interaction, engagement, and emotional response through features like likes, shares, comments, and real-time updates. The uses and gratifications theory and Cognitive Dissonance Theory can help explain how social media usage leads to emotional engagement and emotional engagement leads to overconfidence (Papachaeissi, 2009). Social-media usage fulfills various psychological needs, including information seeking, social interaction, and entertainment. As individuals interact with social media content, they may become emotionally invested in the content they consume (Shahbaznezhad, 2021). When investors engage with financial discussions or news on social platforms, it satisfies their need for social interaction and emotional validation, leading to emotional engagement. This engagement can further intensify as content becomes more personalized or aligned with personal beliefs and interests. Emotional engagement with content on social media can significantly affect individuals' self-perceptions and confidence levels (Aljifri, 2023). Overconfidence leads investors to overweight potential gains while underestimating potential losses, aligning with the principles of prospect theory. This can manifest in overtrading, speculative bubbles, or unhedged positions that ultimately hurt investors when the market turns. These theoretical insights contribute to a better understanding of the psychological dynamics that drive investment decisions in the digital age, offering opportunities for interventions that address emotional biases and improve investor behavior.

6.3 Practical Implications

Social media platforms, such as Twitter, Facebook, Instagram, Telegram and specialized investment forums, have become key sources of information and emotional engagement for investors (Massa & Zhang, 2023). The content shared on these platforms often reinforces users' beliefs, interests, and emotions, leading to higher levels of emotional involvement. Social media platforms often encourage emotional engagement, and the emotional engagement often leads to overconfidence, especially when they receive social validation (likes, shares, retweets) or reinforcement of their pre-existing beliefs. The more engaged an investor is with social media content that aligns with their views, the more they are likely to develop a sense of superiority or the belief that they have better information than the market (Tuyon & Ahmed, 2018). This heightened emotional involvement can lead to overconfidence, as investors may overestimate their knowledge or decision-making abilities due to exposure to overly optimistic or biased information. Overconfidence, in turn, negatively impacts investment decisions by fostering unrealistic expectations, excessive risk-taking, and a disregard for prudent financial planning, which can lead

investors to make poor decisions based on overestimation of their predictive abilities (Grezo, 2021). Overconfident investors may engage in excessive trading, market timing, or concentration of investments in high-risk assets. Overconfident investors often believe they can time the market or pick winning stocks better than others, leading to excessive trading and higher transaction costs. (Feng & Chen, 2021; Aljifri, 2023) shown that overconfident investors generally underperform due to these behaviors. To mitigate these risks, it is important for investors, financial institutions, and platforms to incorporate strategies such as enhancing financial literacy, providing real-time feedback on investment outcomes, and fostering a more rational, analytical approach to investment decisions. Investors should be made aware of how emotional engagement with content, especially on social media, can affect their decision-making processes, potentially leading to suboptimal financial outcomes. Financial education programs and advisory services should include insights on how emotional biases like overconfidence can affect investment choices and emphasize critical thinking, risk assessment, and diversified portfolio management as tools to counteract these biases. Advisors can encourage clients to seek out reliable, evidence-based information rather than being swayed by emotionally charged content or unverified tips circulating online. Understanding the connections between social media usage, emotional engagement, and overconfidence is crucial for improving financial decision-making. Social media can serve as both an informational tool and an emotional amplifier, but it also creates cognitive biases that can cloud judgment, particularly in the case of overconfident investors. The practical implications for both individual investors and financial professionals emphasize the need for education, risk management, and self-regulation to mitigate the negative effects of these biases. By recognizing and addressing these behavioral dynamics, investors can make more rational, informed decisions and achieve better long-term outcomes.

References:

6. Acadian Asset Management. (2024). *Invest like the worst: Wealth-destroying portfolio concentration*. Acadian Asset Management. <https://www.acadian-asset.com/investment-insights/ownomics/invest-like-the-worst>.
7. Akula, S. C., Singh, P., Farhan, M., Kumar, P., Cheema, G. S., Rehman, M., Sharma, A., & Kumar, P. (2024). Evaluating the Effectiveness of a Chatbot-Based Workshop for Experiential Learning and Proposing Applications. *Eurasian Journal of Educational Research*, 2024(109), 32–45. <https://doi.org/10.14689/ejer.2024.109.003>
12. Aljifri, R. (2023). Investor psychology in the stock market: An empirical study of the impact of overconfidence on firm valuation. *Borsa Istanbul Review*, 23(1), 93-112.
13. Antoniou, C., et al. (2017). The influence of social media on investor behavior and market volatility. *Journal of Behavioral Finance*, 18(4), 245-263.
14. Barber, B. M., & Odean, T. (2001). The Internet and the investor. *The Journal of Economic Perspectives*, 15(1), 41–54. <https://doi.org/10.1257/jep.15.1.41>
15. Bird, R., Gallagher, D. R., Khan, A., & Yeung, D. (2023). Do Emotions Influence Investor Behavior?, *Journal of Behavioral Finance*, 1-22.
16. Bouteska, A., Harasheh, M., & Abedin, M. Z. (2023). Revisiting overconfidence in investment decision-making: Further evidence from the US market. *Research in International Business and Finance*, 66, 102028.
17. Cade, N. L. (2018). Corporate social media: How two-way disclosure channels influence investors. *Accounting, Organizations and Society*, 68, 63-79.
18. Chen, J., & Liu, L. (2023). Social media usage and entrepreneurial investment: An information-based view. *Journal of Business Research*, 155, 113423.
19. Choi, J. J., Laibson, D., & Madrian, B. C. (2019). Overconfidence and financial decision-making in retirement savings. *Journal of Financial Economics*, 133(3), 692-711.
20. Chokpiriyawat, T., & Siriyota, K. (2024). Bridging emotional intelligence: Applications in psychology through the schutte emotional intelligence scale (seis) in Thai private hospital customers. *International Review of Management and Marketing*, 14(5), 107-112.
21. Cooper, J., & Fazio, R. H. (1984). A new look at dissonance theory. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology*, 17, 229-266.
22. Datareportal. (2024). *Digital 2024: Global overview report*. Retrieved from <https://datareportal.com/reports/digital-2024-global-overview-report>
23. Dessart, L. (2017). Social media engagement: a model of antecedents and relational outcomes. *Journal of Marketing Management*, 33(5-6), 375-399.
24. Dhir, A., Kaur, P., & Rajala, R. (2019). Attitudes towards social media and emotional attachment: Exploring the role of social media in emotional engagement. *Computers in Human Behavior*, 92, 66-74.

22. Statista Report (2024, July 10). *Most used social networks 2024, by number of users*. Feng, Y., & Chen, D. (2021). Overconfidence and market behavior: A meta-analytic review. *Review of Behavioral Finance*, 13(4), 457–475. <https://doi.org/10.1108/RBF-08-2020-0167>
23. Financial Planning Association. (2023). *Who uses social media for investment advice?*.
24. Gupta, R., & Tiwari, R. (2022). Social media, herd behavior, and the volatility of stock prices: Evidence from the US market. *Journal of Corporate Finance*, 78, 1-18. <https://doi.org/10.1016/j.jcorpfin.2022.101560>
25. Glaser, M., Langer, T., & Weber, M. (2005). Inexperienced investors and market behavior. *The Journal of Economic Behavior & Organization*, 58(1-2), 1–16. <https://doi.org/10.1016/j.jebo.2004.01.005>
26. Grezo, M. (2021). Overconfidence and financial decision-making: a meta-analysis. *Review of Behavioral Finance*, 13(3), 276-296.
27. Kumar, S., & Kumar, S. (2024). Social media's sway: how social comparison on social media stimulates impulse travelling; serial mediation study on Indian millennials tourists. *Journal of Hospitality and Tourism Insights*.
28. Kumar, S., & Kumar, S. (2024). Compulsive use of social media and unrestrained buying behavior: Delineating the role of social comparison, fear of missing out and self-esteem. *Journal of Internet Commerce*, 23(4), 503-532.
29. Hassell, L. A., & Stewart, J. (2017). Emotional contagion and overconfidence in social media. *Social Influence*, 12(2), 91-106.
30. Harrigan, P., Evers, U., Miles, M., & Daly, T. (2017). Customer engagement with tourism social media brands. *Tourism Management*, 59, 597–609. <https://doi.org/10.1016/j.tourman.2016.09.015>
31. Hershkovitz, R., et al. (2021). The effect of social media intensity on investor behavior. *Journal of Financial Markets*, 52, 1-17. <https://doi.org/10.1016/j.finmar.2021.03.004>
32. IR Magazine. (2023). *More than a fifth of retail investors influenced by social media advice*. Inghelbrecht, K., & Tedde, M. (2024). Overconfidence, financial literacy and excessive trading. *Journal of Economic Behavior & Organization*, 219, 152-195.
33. Jain, R., Sharma, D., Behl, A., & Tiwari, A. K. (2023). Investor personality as a predictor of investment intention—mediating role of overconfidence bias and financial literacy. *International Journal of Emerging Markets*, 18(12), 5680-5706.
34. Jain, J., Walia, N., Kaur, M., & Singh, S. (2021). Behavioural biases affecting investors' decision-making process: A scale development approach. *Management Research Review*. <https://doi.org/10.1108/MRR-02-2021-0139>
35. Jain, J., Walia, N., Kaur, M., Sood, K., & Kaur, D. (2023). Shaping investment decisions through financial literacy: do herding and overconfidence bias mediate the relationship?. *Global Business Review*, 09721509221147409.
36. Kapoor, K. K., Tamilmani, K., Rana, N. P., Patil, P., Dwivedi, Y. K., & Nerur, S. (2018). Advances in social media research: Past, present and future. *Information Systems Frontiers*, 20, 531-558.
37. Katz, J. E., & Rice, R. E. (2020). The impact of social media on communication. *International Journal of Communication Studies*, 14(2), 101-120.
38. Lee, S. Y., & Choi, Y. J. (2018). Emotional engagement on social media and its influence on user behavior. *Cyberpsychology, Behavior, and Social Networking*, 21(9), 559-565.
39. Li, T., Chen, H., Liu, W., Yu, G., & Yu, Y. (2023). Understanding the role of social media sentiment in identifying irrational herding behavior in the stock market. *International Review of Economics & Finance*, 87, 163-179.
40. Liu, Q., Lee, W. S., Huang, M., & Wu, Q. (2023). Synergy between stock prices and investor sentiment in social media. *Borsa Istanbul Review*, 23(1), 76-92.
41. Lusardi, A., & Mitchell, O. S. (2020). Financial literacy and financial decision-making in older adults: The role of overconfidence. *Journal of Economic Behavior & Organization*, 174, 291-312.
42. Mattioli, M., & de Gregorio, L. (2018). The role of social feedback in shaping online behavior and overconfidence. *Computers in Human Behavior*, 89, 41-50.
43. Massa, M., Zhang, L., & Ziemann, V. (2022). Social media, opinions, and financial markets. *Journal of Financial Economics*, 146(1), 146-169. DOI: 10.1016/j.jfineco.2022.03.001
44. Massa, M., & Zhang, L. (2023). YouTube and the accessibility of financial expertise. *Journal of Financial Economics*, 150(2), 205-222. DOI: 10.1016/j.jfineco.2023.06.018
45. Murray, A., et al. (2019). Social media intensity and its impact on investor overconfidence. *Journal of Behavioral Finance*, 20(1), 53-70. <https://doi.org/10.1080/15427560.2018.1504576>
46. Niu, X., & Chen, Y. (2022). How social media influences investment decisions in cryptocurrency markets. *Journal of Financial Technology*, 7(3), 212-230. <https://doi.org/10.1016/j.jfintec.2022.03.004>

47. Nagpal, R., Singh, P., Angra, P. K., Cheema, G. S., & Rehman, M. (2024). Wearable Computing: Canonical Correlation Analysis (CFA) Statistical Method to Validate the Measurement Models Smart Ergonomic Shoes. *International Journal of Intelligent Systems and Applications in Engineering*, 12(17s), 404–408.
48. OuYang, Z., Xu, J., Wei, J., & Liu, Y. (2017). Information asymmetry and investor reaction to corporate crisis: Media reputation as a stock market signal. *Journal of Media Economics*, 30(2), 82-95.
49. Papacharissi, Z. (2009). The virtual geographies of social networks: A comparative analysis of Facebook and MySpace. *New Media & Society*, 11(1-2), 199-220. DOI: 10.1177/1461444809342578
50. Pellegrino, A., Abe, M., & Shannon, R. (2022). The dark side of social media: Content effects on the relationship between materialism and consumption behaviors. *Frontiers in psychology*, 13, 870614.
51. Radhika, M., Reddy, P. M. K., & Prasad, V. S. (2023). A perspective of investment relationship on effects of social media investment outcomes. *Global Business Review*, 09721509231187496.
52. Rehman, M., Dhiman, B., Kumar, R., & Cheema, G. S. (2023). *Exploring the Impact of Personality Traits on Investment Decisions of Immigrated Global Investors with Focus on Moderating Risk Appetite : A SEM Approach*. 8984(August), 95–110.
53. Rehman, M., Dhiman, B., Nguyen, N., Dogra, R., & Sharma, A. (2024). *Behavioral Biases and Regional Diversity : An In-Depth Analysis of Their Influence on Investment Decisions - A SEM and MICOM Approach*. 4(2), 70–85.
56. Sarwar, A., & Afaf, G. (2016). A comparison between psychological and economic factors affecting individual investor's decision-making behavior. *Cogent Business & Management*, 3(1), 1232907.
57. Sato, H., & Ma, H. (2019). The impact of social media content on users' emotions and attitudes in digital marketing. *Journal of Digital & Social Media Marketing*, 7(3), 45-58.
58. Schivinski, B., Christodoulides, G., & Dabrowski, D. (2016). Measuring consumers' engagement with brand-related social-media content. *Journal of Advertising Research*, 56(1), 64–80. <https://doi.org/10.2501/JAR-2016-004>
59. Shahbaznezhad, H., Dolan, R., & Rashidirad, M. (2021). The role of social media content format and platform in users' engagement behavior. *Journal of Interactive Marketing*, 53(1), 47-65. <https://doi.org/10.1016/j.intmar.2020.11.002>
60. Shamim, K., & Islam, T. (2022). Digital influencer marketing: How message credibility and media credibility affect trust and impulsive buying. *Journal of Global Scholars of Marketing Science*, 32(4), 601-626.
61. Smart Insights Report (2024). *Global social media statistics research summary*.
62. The Newswire. (2023). *Scrolling through stocks: The impact of social media on investment decisions*.
63. Tuyon, J., & Ahmad, Z. (2018). Psychoanalysis of investor irrationality and dynamism in stock market. *Journal of Interdisciplinary Economics*, 30(1), 1-31.
64. Tao, X., & Zhang, R. (2020). The moderating role of social media intensity in emotional reactions to digital advertising. *Journal of Business Research*, 120, 213-221.
65. Verduyn, P., Ybarra, O., Resibois, M., John, O. P., & Kross, E. (2015). The effects of Facebook on emotion: A meta-analysis of experimental studies. *Psychological Bulletin*, 141(2), 1-32. <https://doi.org/10.1037/a0038681>
66. Vidal-Tomas, D., & Alfarano, S. (2020). An agent-based early warning indicator for financial market instability. *Journal of Economic Interaction and Coordination*, 15(1), 49-87.
67. Wang, T., Yeh, R. K. J., Yen, D. C., & Sandoya, M. G. (2016). Antecedents of emotional attachment of social media users. *The Service Industries Journal*, 36(9-10), 438-451.
68. Wang, Y., & Zhang, H. (2023). The impact of social media on retail investor trading decisions: A behavioral finance approach. *Journal of Financial Markets*, 58, 12-34. <https://doi.org/10.1016/j.finmar.2023.01.003>
69. Xie, X., & Yang, Z. (2021). Influence of financial social media influencers on investment decisions: Evidence from the United States. *International Journal of Finance & Economics*, 26(4), 5146-5164. <https://doi.org/10.1002/ijfe.2540>
70. Xu, X., Wang, J., & Zhang, J. (2023). Social media platforms and the democratization of financial knowledge: Evidence from global users. *International Review of Economics & Finance*, 81, 320-335. DOI: 10.1016/j.iref.2023.01.015

71. Zhang, Y., & Wang, Y. (2018). The interaction between social media usage intensity and emotional engagement. *Computers in Human Behavior*, 88, 214-222.
72. Zhang, Y., & Liu, X. (2023). Investor sentiment and stock returns: Evidence from social media data. *Journal of Behavioral Finance*, 24(2), 110-125. <https://doi.org/10.1080/15427560.2023.1943512>
73. Zhao, X., & Wang, Y. (2019). Impact of social media engagement on emotional well-being. *Journal of Media Psychology*, 31(2), 87-98.
74. Zhou, L., & Wang, Y. (2021). The impact of social media sentiment on stock market behavior and investor overconfidence. *Journal of Behavioral Finance*, 22(4), 317-333. DOI: 10.1080/15427560.2021.1940286.